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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/688,610	10/13/2000	David H. Donovan	60990005Z126	9946
22879 7590 11/23/2007 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER THOMPSON, JAMES A	
			ART UNIT 2625	PAPER NUMBER
			MAIL DATE 11/23/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	09/688,610		DONOVAN ET AL.	
	Examiner		Art Unit	
	James A. Thompson		2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2007 and 15 October 2007.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,5-28,34,35 and 37-42 is/are allowed.
- 6) ☒ Claim(s) 3,4 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/15/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 19 September 2007 have been fully considered by Examiner. Some arguments have been found persuasive, and others have been found unpersuasive. Examiner addresses all of Applicant's arguments herein.

Regarding page 24, lines 3-11: As stated in the previous office action, mailed 15 June 2007, Curry (USPN 5,410,414) is an issued patent and is thus given the presumption of validity. See 35 U.S.C. § 282, M.P.E.P. § 1701. Applicant's arguments in response to an Office action on Applicant's application do not alter this presumption since the validity or invalidity of any claim of an issued U.S. Patent is to be determined either (1) in the examination of a reissue application of the patent, (2) during a reexamination proceeding to reexamine the patent, (3) during an interference involving the patent, or (4) otherwise as a matter to be determined by a court. Further, as a matter of public policy, examiners are not to express any opinion as to the validity or invalidity of any claim of a U.S. Patent. See M.P.E.P. § 1701.

Regarding page 24, line 13 to page 34, line 10: Applicant states that three features, namely (1) measurement of variations in printing intensity among individual printing elements; (2) compensation for such variations, based upon matrix modification that is performed in a rendition stage; and (3) feedback that enables the compensation to be different for different print densities within a print, are all recited in the independent claims and are not taught by Koike (USPN 5,988,790). The above three features have been introduced into the claims through Applicant's latest amendment. Some of the independent claims recite "introducing continuous control enabling compensation that is different for different print densities", which corresponds to the third feature listed above.

Examiner agrees with Applicant that the above three features do distinguish over the cited prior art references. Further, Examiner has not discovered any additional prior art references which would anticipate the claims and/or render the claims obvious to one of ordinary skill in the art at the time of the invention. However, Examiner notes that claim 36 does not contain any of these three features. Thus, while all the other claims are deemed allowable over the prior art, a prior art rejection of claim 36 remains and is set forth below. Additionally, the rejections of claims 3 and 4 under 35 U.S.C. § 112, second paragraph as set forth in the previous office action have not been adequately addressed by Applicant and therefore remain in the present office action.

Information Disclosure Statement

2. The information disclosure statement filed 15 October 2007 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the cited foreign patent references are not in the case file. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Rejections – 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 3 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.** The limitation “the optical density transformation” is recited in line 3 of each of claim 3 and claim 4. There is insufficient antecedent basis for this recitation in either claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claim 36 is rejected under 35 U.S.C. 102(b) as being anticipated by Koike (US Patent 5,988,790).**

Regarding claim 36: Koike discloses measuring a parameter (α) related to print-quality defects due to departure of print medium advance from an optimum value (column 12, lines 34-49 and column 14, lines 31-43 of Koike); based on the measured parameter, scaling such input image data with regard to image dimension in the advance direction to compensate for said departure (column 12, lines 34-49 of Koike – *dot sizes scaled based on amount of print line widening or narrowing; feed direction is the*

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advance direction); and printing such image using the scaled input image data (column 14, lines 11-12 lines 37-43 of Koike), wherein the multi-element printing array is an inkjet printhead (column 8, lines 46-49 of Koike).

Allowable Subject Matter

7. Claims 1-2, 5-28, 34-35 and 37-42 are allowed.

The following is an examiner's statement of reasons for allowance:

Independent claims 1, 9, 25, 34, 35, 37, 38 and 40 each have the features: (1) measurement of variations in printing intensity among individual printing elements; (2) compensation for such variations, based upon matrix modification that is performed in a rendition stage; and (3) feedback that enables the compensation to be different for different print densities within a print. Some of the independent claims recite "introducing continuous control enabling compensation that is different for different print densities" (or similar language), which corresponds to the feedback feature. Examiner has not found this particular arrangement of printing intensity variation measurement, compensation, and feedback in the prior art. Koike does not teach the recited matrix modification or the recited feedback. There is no negative feedback or continuous control enabling compensation, as required by the above mentioned independent claims.

The closest prior art discovered is Takagi (USPN 5,384,587), which measures and compensates for printing intensity variations among individual printing elements. However, Takagi does not modify any matrix or numerical tabulation to perform the compensation, nor does Takagi use the recited feedback mechanisms. Lee (USPN 6,412,903 B1) and Haflinger (USPN 6,672,697 B2) are closer art than Takagi in that they teach most, if not all, of the elements of the independent claims. However, neither Lee nor Haflinger qualify as *prior* art references.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James A. Thompson
Examiner
Technology Division 2625

JAT
11 November 2007



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